# **Abbreviations and Definitions of Terms**

## **AIDS** registry

Listing of individuals with HIV infection or acquired immunodeficiency syndrome (AIDS) disease reported to the Wisconsin AIDS/HIV Program.

## Acid-fast bacilli (AFB)

Organisms that retain certain stains even after being washed with acid alcohol. Most are mycobacteria. When seen on a stained smear of sputum or other clinical specimen, a diagnosis of tuberculosis should be considered.

# Aggregate Report for Tuberculosis Program Evaluation (ARPE)

Standard report form used to report activities related to contact investigation, targeted testing, and treatment of latent TB infection to CDC.

#### **ATS**

# **American Thoracic Society**

#### **Active TB disease**

Clinical and/or radiographic evidence of current TB. Established most definitively by isolation of *M. tuberculosis* on culture.

#### Adherence to treatment

Following the recommended course of treatment by taking all the prescribed medications for the entire length of time necessary.

# Aggregate analysis

Generation of summary statistics to identify problems or deviations from objectives

## Airborne precautions

Measures designed to reduce the risk of airborne transmission of infectious agents such as *M. tuberculosis*.

## ALA/W

**American Lung Association of Wisconsin** 

#### **APIC**

Association for Professionals in Infection Control and Epidemiology, Inc.

## "B" notification - B-1 or B-2

Division of Quarantine classifications for individuals who arrive in the US as immigrants (including those on K1 visas for fiancée(e)s) or refugees who had abnormalities identified on chest radiographs that are indicative of tuberculosis. Prior to leaving their home country they were determined to be non-infectious. These classifications require follow-up once the individual arrives at their US destination. A "yellow slip" is sent to the Wisconsin TB Program and then forwarded to LHDs with a cover letter indicating what actions need to be taken.

# Centers for Disease Control and Prevention (CDC)

The Federal agency charged with the primary responsibility for providing funding and other resources, leadership and coordination to national tuberculosis control and prevention efforts.

#### Case

Refers to a patient with tuberculosis disease.

## Case analysis

Individual review of specified variables from a tuberculosis case record to assess the patient's clinical status, the adequacy of the medication regimen, treatment adherence or completion, and the results of contact investigation.

#### Case consultation

Providing professional or technical advice or opinions to those providing services to TB cases.

### Case management

Functions which ensure that an individualized treatment plan is developed for a person with tuberculosis infection and that appropriate treatment and support services are provided to ensure the desired outcomes in a timely, effective and coordinated manner.

# Chest x-ray (CXR)

# Clinically evaluated

Medical exam that includes a chest radiograph, review of TB signs and symptoms and collection of clinical specimens when appropriate.

## **Cohort analysis**

Summary review of specified variables from tuberculosis case records counted during a specific time period to further characterize problems.

#### Confirmed TB disease

Clinically active TB with characteristics that have met the official CDC criteria to be counted as a case of tuberculosis.

## **Community Based Organization (CBO)**

An agency that provides social services or support to a designated geographic or demographic area.

#### Contact

Person who has shared the same air space with a person with infectious TB for a sufficient period of time to make transmission of infection likely.

Close contact - Persons who have shared the same air space with a person with infectious TB, and is at high risk of developing infection with *M. tuberculosis* because of the length of time and intensity of exposure or their vulnerability such as young children, the immune compromised, etc.

Other than close contact - Person who has shared the same air space with a person with infectious TB, but is at a lower risk than a close contact of developing infection with *M. tuberculosis* because of the length of time and/or intensity of exposure.

### **Contact investigation**

The process of identifying, examining, evaluating, and treating all persons who are at risk of infection with *M. tuberculosis* due to recent exposure to infectious tuberculosis or suspected tuberculosis.

## Completion of therapy

The point at which a patient has taken all the medication prescribed and clinical indicators (chest radiograph, sputum culture

conversion, symptom improvement, etc.) of cure have been collected and documented.

#### Culture

Organisms grown on media (substances containing nutrients) so that they can be identified; a **positive** culture for *M. tuberculosis* contains live tubercle bacilli, whereas a **negative** culture contains no detectable live tubercle bacilli.

#### Culture confirmed tuberculosis

Tuberculosis disease that has been confirmed by culture positive identification on a clinical specimen.

## **Directly Observed Therapy (DOT)**

Supervised therapy that involves the direct visual observation by a health care provider (e.g., outreach worker or nurse) or other reliable person (e.g., homeless shelter worker) of a patient's ingestion of medication.

# Dispensary (see Public Health Dispensary)

#### DNA fingerprinting

Laboratory technique used to identify related strains of *M. tuberculosis*.

## Drug susceptibility testing

Laboratory tests that determine whether the tubercle bacilli cultured from a patient are susceptible or resistant to various anti-TB drugs.

## **Enablers**

Anything that assists the patient to more readily complete therapy such as bus tokens, groceries, gas vouchers, etc.

#### Fee exempt testing

Laboratory testing that is available without charge to local health departments from the Wisconsin State Laboratory of Hygiene for purposes of public health.

# Health care provider

Physicians and nurses licensed under s. 441 and 448 of Wisconsin Statutes.

#### High risk

Refers to circumstances or behaviors that increase the chances that a person

becomes infected, breaks down with or fails treatment for tuberculosis.

Active TB disease – TB disease in a patient that is at greater risk of treatment failure due to drug resistance, immune suppression, or non-compliance.

Latent TB infection - TB infection in a patient that is highly likely to result in active disease and the patient may easily become infectious.

**Population** - Certain demographic groups that are more likely to be exposed to and infected with TB, including close contacts of people with infectious TB.

# **Human service agency**

An agency that provides primary health care, health education, and/or social services.

#### Infection Control Practitioner (ICP)

Individual responsible for surveillance, prevention and control of infectious disease transmission within a health care facility.

#### Infectious TB

Tuberculosis of the respiratory tract, capable of transmitting infection to others.

# Incentives

Rewards in return for compliance with medical regimen.

#### Incidence

A measure of the frequency of new cases of disease (tuberculosis) in a particular population, which occurred during a specified period of time (e.g. the number of new TB cases reported per 100,000 population in Wisconsin during a calendar year).

#### Index case

The first case brought to the attention of the LHD. Usually becomes the focus for an initial contact investigation.

# Interventions

Techniques used to modify an outcome.

## Isolation

The separation from other persons of a person with infectious tuberculosis in a place and under conditions that prevent the transmission of the infection.

#### Isolation order

A legal document from a local health officer requiring an individual with suspected tuberculosis to remain in isolation.

### Local health department (LHD)

A municipal agency established in accordance with s. 250.01(4) Wis. Stats. that provides surveillance, investigation, control and prevention of communicable diseases.

#### Local health officer

The individual who is in charge of a local health department as defined in s. 250.06 Wis. Stats.

#### Latent TB Infection (LTBI)

Infection with *M. tuberculosis*, usually detected by a positive PPD skin test result, in a person who has no symptoms of active TB and who is not infectious.

## **Memorandum of Understanding (MOU)**

An agreement between two or more agencies on resources that will be provided by one to the other(s).

## Medical risk factor

Patient medical conditions that increase the likelihood that latent TB infection will progress to TB disease (e.g., HIV infection, diabetes, end state renal disease).

# Mycobacteriology Laboratory Network (MLN)

Network of Wisconsin laboratories that perform testing for mycobacteria that include *M. tuberculosis*.

## Operational case analysis

Individual review of specified variables from a tuberculosis case record to assess the patient's clinical status, the adequacy of the medication regimen, treatment adherence or completion, and the results of contact investigation. - OR - Program evaluation of policies and procedures to investigate the causes of problems.

#### Outbreak of tuberculosis

The occurrence of tuberculosis (disease or infection) in individuals of the same community or region with a recognized pattern of transmission.

#### **Outcome indicators**

Specific criteria used to monitor quality and effectiveness of tuberculosis care - usually a final health consequence (e.g. sputum culture conversions, chest x-ray improvement, completion of therapy, etc.)

#### Pill counts

A method for monitoring adherence to a treatment regimen. A public health nurse or designee counts the pills left in the medication bottles to check if the patient has taken the required doses.

#### Pill minders

A tool to assist patients in being adherent to treatment. A container for medication marked with the appropriate dose for different days and/or time of day.

#### Preventable case

A case of tuberculosis in which an opportunity for disease prevention was missed (e.g. failure to provide treatment for identified LTBI, failure to identify or examine exposed person during a contact investigation, delayed identification of a case, resulting in prolonged transmission).

## Prevalence

The number of instances of a given disease (tuberculosis) or conditions (LTBI) in a given population at a specified point in time (e.g. the number of tuberculosis patients currently receiving treatment or the number of individuals living with LTBI).

## Previously infected contacts

Contacts to a person with active tuberculosis that had previously tested positive for TB infection.

## Public health dispensary

State certified program of a local health department to prevent and control tuberculosis disease and infection by diagnosis, treatment and case management. Certified public health dispensaries are eligible for reimbursement for services with state funds.

## Qualitative case analysis

Individual review of specified variables from a tuberculosis case record to assess the patient's clinical status, the adequacy of the medication regimen, treatment adherence or completion, and the results of contact investigation. - OR - Evaluation of quality of care given by a program by summarizing individual reviews.

#### **Quality assurance**

The process through which the quality of care and the effectiveness of the TB control program is reviewed and evaluated.

## Reactivating TB disease

TB disease in a patient who has already been treated for active disease and for some reason has again become ill with active tuberculosis.

#### Repository of TB isolates

Storage of patient isolates of *M. tuberculosis* (statewide) in a central location.

# Respiratory isolation

The separation from other persons of a person with infectious pulmonary or laryngeal tuberculosis in a place and under conditions designed to reduce the risk of airborne transmission of infectious agents such as *M. tuberculosis*.

# Report of Verified Case of Tuberculosis (RVCT)

Standard case report form used to report tuberculosis cases to CDC.

## Reportable disease

Diseases identified in Appendix A of Wisconsin Administrative Rule HFS. 145 that must be reported to a local health officer and the state Division of Public Health.

#### Second round testing

Testing done in a contact investigation on identified contacts 90 days post their last exposure to the individual with infectious tuberculosis.

# Source case investigation

An investigation done to identify the infectious person who is believed to have transmitted infection to the index case.

### Sputum culture conversion

Best indicator for the evaluation of treatment. Sputum collected after the initial positive culture and the initiation of treatment that document the conversion of

sputum culture from positive to negative for *M. tuberculosis*.

# Sputum smear positive

Sputum that is positive for AFB when appropriately stained and viewed under a microscope. Individuals with TB who are sputum smear-positive for AFB are considered more infectious than those with smear-negative sputum.

#### **Standards**

Level of excellence regarded as a measure of adequacy

**Outcome** – Specific, measurable result (e.g. percent of patients completing therapy).

**Process** – Set of criteria based on specific activities performed (e.g. number of patients tested, number of nursing visits, etc.).

## Suspect

An individual likely to have clinically active TB. The individual has signs or symptoms suggestive of tuberculosis that have not yet been confirmed by clinical and/or laboratory criteria.

## Surveillance

Activities related to finding cases of TB, guiding them into the health care system, and maintaining records on their cases for such purposes as identifying high-risk groups and trends in morbidity and related mortality. Includes activities related to identifying and maintaining records on persons with tuberculosis infection as well, in order to identify candidates for preventive therapy and, in institutional settings, to identify the quality of infection control practices.

#### Technical assistance (TA)

Building the capacity of personnel by providing information and training as needed based on the needs of the organization and the expertise of the provider.

#### Targeted testing

Testing for LTBI among persons at high risk for TB who would benefit from treatment for LTBI, if detected.

## **Tuberculosis (TB)**

An infectious disease of man and animals caused by the species *Mycobacterium tuberculosis complex* and characterized by the formation of tubercles and caseous necrosis in the tissues.

#### TB case

Clinically active TB in a person whose case characteristics have met official Centers for Disease Control and Prevention criteria to be counted as a case of tuberculosis.

#### TB disease

Disease caused by *M. tuberculosis* usually found in the lungs, but possibly anywhere in the body. Differentiated from TB infection by the identification of *M. tuberculosis* from a culture or other clinical findings suggestive of TB, i.e., abnormal chest x-ray, positive PPD, clinical improvement after treatment with multiple anti-TB drugs, epidemiologic findings, etc.

#### TB infection

The condition in which organisms capable of causing TB disease enter the body and elicit a response from the host's immune defenses. TB infection may or may not lead to a clinical case.

#### TB isolate

A group of organisms isolated or separated from a specimen and identified as *M. tuberculosis*.

#### TB skin test

Often referred to as the Mantoux skin test, the TB skin test (TST) is the standard method of identifying individuals with TB infection. The test is performed by placing an intradermal injection of 0.1 ml of purified protein derivative (PPD) in the inner surface of the forearm.

# **TB** suspect

An individual likely to have clinically active TB. An individual is considered a TB suspect when one or more of the following are present:

- a prescription is written for two or more tuberculosis drugs to be taken for a period of more than 2 months
- clinical signs and symptoms (such as a chest radiograph) suggestive of tuberculosis disease or

 a smear is positive for acid fast bacilli (AFB) in a patient with no previous history of a non-tuberculosis mycobacteria.

## **TB Suspect Case Data**

A form created by the Wisconsin TB Program with numerous data elements on patient history, reporting, laboratory specimens and chest x-rays.

# **Tuberculosis Information Management System (TIMS database)**

A software program supplied by the Centers for Disease Control and Prevention (CDC) that facilitates the management of TB cases and the tracking and reporting of TB control program activities.

# Tuberculosis Related Benefit (TR Benefit)

A Medicaid benefit for individuals with LTBI or TB disease that covers out patient medical costs.

#### **Unusual occurrence of TB**

When a case of TB occurs that was not preventable by conventional wisdom in a person that is not a member of a high-risk group.

# Wisconsin Tuberculosis Program (Wisconsin TB Program)

The state TB control and prevention program located in the Division of Public Health, Bureau of Communicable Diseases.